1891MNRAS..51..310P

TABLE V.

| N.P.D. | Greenwich-Melbourne. | | | Greenwich-Cape. | |
|---|---|---|---|---|---|
| | | I. | II. | | |
| ° | s | " | " | s | " |
| 50 | −·009 | −0·54 | +1·71 | | |
| 55 | −·005 | −0·50 | +1·05 | −·008 | +0·09 |
| 60 | ·000 | 0·00 | +1·15 | −·004 | +0·33 |
| 65 | +·005 | +0·53 | +1·41 | ·000 | +0·51 |
| 70 | +·008 | +0·88 | +1·58 | +·003 | +0·53 |
| 75 | +·004 | +0·90 | +1·45 | +·002 | +0·59 |
| 80 | −·009 | +0·76 | +1·20 | −·001 | +0·59 |
| 85 | −·016 | +0·58 | +0·92 | −·005 | +0·40 |
| 90 | −·014 | +0·56 | +0·82 | −·012 | +0·17 |
| 95 | −·007 | +0·82 | +1·01 | −·011 | +0·15 |
| 100 | +·008 | +1·20 | +1·33 | +·002 | +0·35 |
| 105 | +·027 | +1·24 | +1·32 | +·014 | +0·44 |
| 110 | +·049 | +1·24 | +1·26 | +·030 | +0·54 |
| 115 | +·065 | +1·40 | +1·37 | +·054 | +0·75 |
| 120 | +·079 | +1·77 | +1·69 | +·069 | +1·14 |

*Blackheath:*
*February* 1891.

---

## *Note on the Parallax of β Aurigæ.* By the Rev. Professor Pritchard, D.D., F.R.S.

Attention having been called to this star by the remarkable spectroscopic observations that have been made at Harvard and Potsdam, preparations were made for the early determination of the parallax. These observations necessarily come within the scheme for the determination of the relative parallax of the stars of the 2nd magnitude, in process of reduction at Oxford.

This star has been referred to two others, whose magnitudes are respectively 8 8 and 10·2 magnitude, and whose approximate co-ordinates are—

| | Pos. Ang. | Distance. |
|---|---|---|
| | ° ′ | " |
| *a* ... ... ... ... | 91 50 | 710·9 |
| *b* ... ... ... ... | 269 10 | 945·2 |

The resulting parallax from each of the stars is—

| | |
|---|---|
| *a* ... ... ... ... ... | +0"·065 ± 0"·024 |
| *b* ... ... ... ... ... | +0·059 ± 0·025 |

The identity of these relative parallaxes leads to the conclusion that the stars of comparison are either situated on a sphere

Downloaded from http://mnras.oxfordjournals.org/ at Western Oregon University on May 21, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

1891MNRAS..51..310P

having $\beta$ *Aurigæ* for its centre, or they belong to a remote system of stars in which $\beta$ *Aurigæ* has no part, and this identity may possibly, therefore, indicate an absolute parallax.

Assuming the conclusions of Professor Vogel's determination of the distance between the centres of the two components of $\beta$ *Aurigæ* at 1,650,000 geographical miles, it appears that the greatest angular separation of the two components is no more than 0″·005.

1891 *March* 12.

---

## *The Companions of Aldebaran.* By S. W. Burnham.

I have recently finished a set of measures of the companions of *Aldebaran* with the large telescope, and these taken in connection with prior measures are of considerable interest in showing the relations existing between the bright star and its several attendants. The nearest companion was found with the Chicago 18½-inch refractor in 1877, and this is now shown to have the same proper motion as the principal star; a result which would not be expected considering the distance and great difference in magnitudes. Both distance and position angle appear to have remained unchanged, the small difference in measures being fully accounted for by the extreme minuteness of the companion and the difficulty of measuring it so near a first-magnitude star. It was a very difficult object to see with the Chicago telescope, and might easily be overlooked even with the 36-inch refractor. I give below all the measures that have been made of this star.

The more distant Herschel companion has been observed for more than a hundred years, and the change shown by the measures has usually been ascribed solely to the proper motion of *Aldebaran*. The distinguished French astronomer Flammarion was the first to notice the fact that the well-known proper motion of A could not account for the relative change, and therefore came to the conclusion that B must have a proper motion of its own, and in a different direction. Of the correctness of this view there can be no doubt, and the amount and direction of the relative displacement of C should be as well known as of most stars. This motion is almost exactly half that of A, and is perhaps larger than that of any known star as faint as the eleventh magnitude which is not connected and moving with some brighter component.

In looking at this object in 1888 with the 36-inch, I found that the Herschel companion was also double, or had a very faint attendant a little more than 2″ distant. This is too difficult for most telescopes, and I am not aware that it has been seen elsewhere. It was measured in 1888, and again this year.

The several positions of B and C, as shown by the measures,

Downloaded from http://mnras.oxfordjournals.org/ at Western Oregon University on May 21, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System